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## CURSO DE LINUX

TI



**INVERSIÓN**  
\$5,029.00 + IVA

**DURACIÓN**  
60 HRS.

**MODALIDAD**  
En Linea

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## OBJETIVO

Este curso de Linux ayuda a los estudiantes a prepararse para la certificación y convertirse en usuarios expertos de la interfaz de la línea de comandos Linux. Después de completar este curso, los estudiantes están preparados para tomar el examen de certificación TestOut Linux Pro y los exámenes CompTIA Linux+ LX0-103 y LX0-104. Asimismo, los estudiantes están equipados con el conocimiento y las habilidades que necesitan para el lugar de trabajo.

## DIRIGIDO A

Este curso de Linux va dirigido a toda persona interesada en obtener las certificaciones CompTIA Linux+ LX0-103 y LX0-104, así como cualquier miembro del área de sistemas o redes de alguna empresa que quiera aprender a administrar este sistema operativo.



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## BENEFICIOS

### Aprobado por CompTIA

TestOut Linux Pro posee contenido de calidad aprobado por CompTIA y se ha verificado que cubre el 100 % por ciento de los objetivos de los exámenes de certificación CompTIA Linux+ LX0-103 y LX0-104.

### Simulaciones del mundo real

LabSim permite a los estudiantes usar la interfaz de la línea de comandos Linux para completar tareas que encontrarían como administrador del sistema Linux. Los estudiantes que reciben este curso no solo están preparados para la certificación sino también para el lugar de trabajo.

### Distribución Linux personalizada

TestOut Linux Pro posee una distribución Linux personalizada. Esta distribución personalizada cubre comandos de varias distribuciones Linux, asegurando que sus estudiantes tengan la experiencia que necesitan para aprobar los exámenes de certificación Linux+ LX0-103 y LX0-104 y que tengan una ventaja en sus carreras.

### Exámenes ilimitados de práctica de certificación

TestOut Linux Pro incluye exámenes de práctica para el examen de certificación TestOut Linux Pro y los exámenes de certificación CompTIA Linux+ LX0-103 y LX0-104. Los estudiantes pueden adquirir confianza y habilidades de prueba al practicar todas las veces que lo deseen.

## TEMARIO

### I. INTRODUCTION

#### a. Introduction



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- i. Linux Operating System Introduction (15:53)
- ii. Linux Implementations (13:12)
- iii. Using the Simulator (11:19)
- iv. Manage Linux Files

## II. USING LINUX

### a. The Shell

- i. Shell Overview (6:43)
- ii. Shell Facts
- iii. Shell Commands (15:56)
- iv. Entering Shell Commands (7:23)
- v. Working with the Linux Shell (11:02)
- vi. Linux Shell Command Facts
- vii. Practice Questions

### b. Linux Help

- i. Linux Help Resources (11:56)
- ii. Accessing Help Resources (11:24)
- iii. Help Facts
- iv. Get Help 1
- v. Get Help 2
- vi. Get Help 3
- vii. Text Editors
- viii. Text Editors (13:45)
- ix. Using vi (10:52)
- x. vi Facts
- xi. Create a New File
- xii. Modify an Existing File
- xiii. Practice Questions

### c. Aliases

- i. Aliases (4:45)
- ii. Using Aliases (7:57)
- iii. Alias Facts

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- iv. Practice Questions

- d. **Environment Variables**

- i. Environment Variables (10:18)
- ii. Managing Environment Variables (12:10)
- iii. Environment Variable Facts
- iv. View Environment Variables
- v. Practice Questions

- e. **Shell Configuration Files**

- i. Shell Configuration Files (8:32)
- ii. Viewing Shell Configuration Files (8:29)
- iii. Shell Configuration Facts
- iv. Practice Questions

- f. **Redirection and Piping**

- i. Redirection (9:59)
- ii. Piping (6:18)
- iii. Using Redirection (6:43)
- iv. Using Piping (4:05)
- v. Redirection and Piping Facts
- vi. Command Substitution (6:40)
- vii. Command Substitution Facts
- viii. Practice Questions

- g. **Directories**

- i. Directory Navigation (8:43)
- ii. Navigating Directories (10:04)
- iii. Managing Directories (6:20)
- iv. Directory Management Facts
- v. Find the Working Directory
- vi. View Directory Information
- vii. Find a Hidden Directory
- viii. Create Directories
- ix. Delete Directories

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x. Practice Questions

## h. Files

- i. Commands for Viewing Files (8:43)
- ii. File Management (10:29)
- iii. Viewing File Contents (7:58)
- iv. Managing Files (11:02)
- v. File Management Facts
- vi. View the Contents of a File
- vii. View a List of Available Shells
- viii. Delete Files
- ix. Move Files
- x. Delete Files and Directories
- xi. Practice Questions

## i. Links

- i. Links (6:09)
- ii. Creating Links (9:36)
- iii. Link Facts
- iv. Create a Hard Link
- v. Create a Symbolic Link
- vi. Practice Questions

## j. Filesystem Hierarchy Standard (FHS)

- i. Filesystem Hierarchy Standard (FHS) (12:55)
- ii. Filesystem Hierarchy Standard (FHS) Facts
- iii. Practice Questions

## k. Locating and Searching Files

- i. File Location Utilities (10:35)
- ii. Finding Linux Commands (8:35)
- iii. Finding Files (9:35)
- iv. File Search Facts
- v. Content Search Utilities (9:13)
- vi. Finding File Content (6:40)

- vii. Content Search Facts
- viii. Practice Questions

## III. INSTALLATION AND LOCALIZATION

### a. Linux System Design

- 1. System Design Part 1 (9:00)
- 2. System Design Part 2 (12:56)
- 3. System Design Facts
- 4. Practice Questions

### b. Linux Installation

- i. Linux Installation (12:02)
- ii. Installing Linux (12:29)
- iii. Linux Installation Facts
- iv. Practice Questions

### c. Localization

- i. Locale Settings (11:22)
- ii. Configuring Locale Settings (6:06)
- iii. Localization Facts
- iv. Practice Questions

## IV. BOOT AND SHUTDOWN

### a. Linux Boot Process

- i. Linux Boot Process (10:20)
- ii. Linux Boot Process Facts
- iii. Practice Questions

### b. Bootloaders

- i. GRUB2 Bootloader (15:04)
- ii. Using GRUB2 (5:42)
- iii. GRUB2 Bootloader Facts
- iv. Set the GRUB Timeout
- v. Configure Dual Boot
- vi. Practice Questions

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## c. **systemd**

- i. systemd Boot Targets (9:11)
- ii. Managing Boot Targets (9:03)
- iii. Change the Current Target
- iv. Set the Default Boot Target
- v. Boot Target Facts
- vi. Practice Questions

## d. **System Services**

- i. System Services (10:20)
- ii. Managing System Services (7:10)
- iii. Manage System Services
- iv. Enable System Services at Boot
- v. System Service Facts
- vi. Practice Questions

## e. **System Shutdown**

- i. System Shutdown (7:42)
- ii. Shutting Down the System (6:04)
- iii. Using wall to Message Users (3:17)
- iv. Shutdown Facts
- v. Shut Down Immediately
- vi. Shut Down with Notification
- vii. Shut Down and Reboot
- viii. Practice Questions

## V. USER INTERFACES AND DESKTOPS

### a. **X Window System**

- i. X Window System (7:48)
- ii. X Window System Facts
- iii. Practice Questions

### b. **Display Managers**

- i. Display Managers (7:31)

- ii. Configuring the LightDM Display Manager (6:32)
- iii. LightDM Configuration Facts
- iv. Practice Questions

c. **Accessibility**

- i. Accessibility (6:05)
- ii. Configuring Accessibility Settings (5:52)
- iii. Accessibility Facts
- iv. Practice Questions

## VI. SOFTWARE INSTALLATION

a. **Red Hat Package Manager (RPM)**

- i. Red Hat Package Manager (RPM) (11:01)
- ii. RPM Package Management (12:36)
- iii. Managing RPM Packages (12:36)
- iv. Install an RPM Package
- v. Remove an RPM Package
- vi. Update an RPM Package
- vii. RPM Facts
- viii. Practice Questions

b. **Online Package Installation**

- i. Yellowdog Updater, Modified (YUM) (9:49)
- ii. Installing Packages with YUM (4:02)
- iii. Installing Packages with Dandified YUM (DNF) (6:15)
- iv. YUM and DNF Facts
- v. Use DNF to Install an RPM Package
- vi. Use DNF to Remove an RPM Package
- vii. Practice Questions

c. **Debian Package Manager (dpkg)**

- i. Debian Package Manager (dpkg) (7:46)
- ii. Advanced Packaging Tool (apt-get) (5:38)
- iii. Managing Debian Packages (9:30)



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- iv. Debian Package Management Facts
- v. Practice Questions

## d. Shared Libraries

- i. Shared Libraries (12:31)
- ii. Managing Shared Libraries (3:46)
- iii. Shared Libraries Facts
- iv. Practice Questions

## VII. USERS AND GROUPS

### a. User and Group Overview

- i. Linux User Overview (15:39)
- ii. Linux Group Overview (7:06)
- iii. User and Group File Review (13:25)
- iv. User and Group Facts
- v. View User Account Information
- vi. View Group Membership Information
- vii. Practice Questions

### b. User Management

- i. User and Password Management (13:28)
- ii. Managing Users (10:09)
- iii. Managing User Passwords (6:29)
- iv. User Management Facts
- v. Create a User Account
- vi. Rename a User Account
- vii. Delete a User
- viii. Change Your Password
- ix. Change a User's Password
- x. Lock and Unlock User Accounts
- xi. Practice Questions

### c. Group Management

- i. Group Management (6:37)

- ii. Managing Groups (7:48)
- iii. Group Management Facts
- iv. Rename and Create Groups
- v. Add Users to a Group
- vi. Add a User to Additional Groups
- vii. Delete a Group and Users
- viii. Remove a User from a Group
- ix. Remove a User from All Groups
- x. Practice Questions

## VIII. DISK AND FILE SYSTEM MANAGEMENT

### a. MBR Disk Partitions

- i. MBR Disk Partitions (13:34)
- ii. Managing MBR Partitions (10:34)
- iii. Viewing MBR Partitions (3:59)
- iv. MBR Partition Management Facts
- v. Device Naming Facts
- vi. View the MBR Partition Table
- vii. Practice Questions

### b. GUID Partitions

- i. GUID Partitions (10:59)
- ii. Managing GUID Partitions (10:07)
- iii. GUID Partition Management Facts
- iv. Practice Questions

### c. Logical Volume Manager

- i. Logical Volume Manager (LVM) (13:31)
- ii. Using LVM (7:49)
- iii. LVM Facts
- iv. Practice Questions

### d. File Systems

- i. Linux File System Types (13:54)

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- ii. File System Creation (10:50)
  - iii. Swap Area Management (7:39)
  - iv. Creating a File System (7:28)
  - v. File System Management Facts
  - vi. Format a Hard Disk with ext3
  - vii. Format a Hard Disk with ext4
  - viii. Create a Swap Area
  - ix. Practice Questions
- e. **Mounting File Systems**
- i. File System Mounting (13:53)
  - ii. Mounting a File System (12:30)
  - iii. File System Mounting Facts
  - iv. Mount a Volume
  - v. Unmount a Volume
  - vi. Mount a DVD Drive
  - vii. Practice Questions
- f. **File System Maintenance**
- i. File System Maintenance (15:48)
  - ii. Maintaining File Systems (11:37)
  - iii. File System Maintenance Facts
  - iv. Determine the Amount of Free Disk Space
  - v. Determine the Directory Size
  - vi. Practice Questions
- g. **Disk Quotas**
- i. Disk Quotas (8:58)
  - ii. Managing Quotas (11:22)
  - iii. Quota Facts
  - iv. Find the User Quota
  - v. Generate a Quota Report
  - vi. Turn Quotas On
  - vii. Turn Quotas Off

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- viii. Edit Quotas 1
  - ix. Edit Quotas 2
  - x. Practice Questions
- h. Ownership**
- i. Ownership (7:11)
  - ii. Managing Ownership (7:28)
  - iii. File Ownership Facts
  - iv. View Ownership Information
  - v. Change File Ownership
  - vi. Change Group Ownership for a File
  - vii. Change Directory Ownership
  - viii. Practice Questions
- i. Permissions**
- i. Permissions (16:59)
  - ii. Managing File Permissions (10:50)
  - iii. Managing Directory Permissions (7:28)
  - iv. Permission Facts
  - v. Set Directory Permissions
  - vi. Add File Permissions
  - vii. Set File Permissions
  - viii. Enable Directory Browsing
  - ix. Practice Questions
- j. umask**
- i. umask (8:40)
  - ii. Using umask (8:13)
  - iii. umask Facts
  - iv. Change the umask
  - v. Practice Questions
- k. Special Permissions**
- i. Special Permissions (7:29)
  - ii. Assigning Special File Permissions (10:55)



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- iii. Special Permission Facts
- iv. Set the SUID Bit
- v. Remove SUID and SGID Permissions
- vi. Practice Questions

## I. Archive and Backup

- i. File Archives (11:01)
- ii. Using tar (7:17)
- iii. Create a Compressed tar File
- iv. Extract from tar Files
- v. Archive Facts
- vi. cpio and dd (14:36)
- vii. Using cpio and dd (10:12)
- viii. cpio and dd Facts
- ix. Practice Questions

## IX. HARDWARE INSTALLATION

### a. Device Drivers

- i. Device Drivers (7:21)
- ii. System Hardware Information (9:03)
- iii. Viewing Hardware Information (12:24)
- iv. Device Driver Facts
- v. View /proc Information
- vi. Practice Questions

### b. Kernel Module Management

- i. Kernel Module Management (11:57)
- ii. Managing Kernel Modules (6:00)
- iii. Kernel Module Management Facts
- iv. Insert a Module into the Kernel
- v. Remove a Module from the Kernel
- vi. Practice Questions

### c. Hotplug and Coldplug Devices

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- i. Hotplug and Coldplug Devices (10:13)
- ii. Hotplug and Coldplug Device Facts
- iii. Practice Questions

## X. PROCESSES AND SYSTEM SERVICES

### a. Processes

- i. Linux Processes (10:55)
- ii. Process Heredity (9:36)
- iii. Process Facts
- iv. Process Display (12:31)
- v. Viewing Process Information with top (5:14)
- vi. Viewing Process Information with ps (8:29)
- vii. Viewing Process Information with pgrep (3:03)
- viii. Process Display Facts
- ix. View Process Information
- x. Practice Questions

### b. Process Management

- i. Process Management (6:44)
- ii. Switching Foreground and Background Processes (5:44)
- iii. Process Prioritization (10:10)
- iv. Prioritizing Processes (7:02)
- v. Process Management Facts
- vi. Process Termination (13:43)
- vii. Terminating Processes (7:22)
- viii. Process Termination Facts
- ix. Stop a Zombie Process
- x. Practice Questions

### c. Task Management

- i. at Task Scheduling (11:33)
- ii. Scheduling Tasks with at (4:36)
- iii. at Facts
- iv. cron Task Scheduling (12:55)

- v. Scheduling Tasks with cron (9:11)
  - vi. cron Facts
  - vii. Using anacron (6:37)
  - viii. anacron Facts
  - ix. Practice Questions
- d. Print Management**
- i. Common Unix Print System (CUPS) Operation (8:37)
  - ii. CUPS Installation and Configuration (10:23)
  - iii. Configuring a CUPS Printer (10:42)
  - iv. CUPS Facts
  - v. Print Management Commands (9:47)
  - vi. Managing Print Jobs (7:50)
  - vii. Printer Management Facts
  - viii. Print a File
  - ix. Remove a Print Job
  - x. Practice Questions
- e. System Time Configuration**
- i. Time Zone Settings (11:16)
  - ii. Configuring Time Zone Settings (3:50)
  - iii. Time Zone Facts
  - iv. Time Maintenance (8:18)
  - v. Managing System Time (8:22)
  - vi. Time Maintenance Facts
  - vii. Network Time Protocol (NTP) (15:06)
  - viii. Synchronizing Time with NTP (11:34)
  - ix. NTP Facts
  - x. Practice Questions
- f. Mail Transfer Agent (MTA)**
- i. MTA Overview (10:59)
  - ii. Managing Mail (7:51)
  - iii. MTA Facts

iv. Practice Questions

**g. Structured Query Language (SQL)**

- i. SQL Data Management (11:08)
- ii. Manipulating SQL Data (13:50)
- iii. SQL Facts
- iv. Practice Questions

## XI. SYSTEM MONITORING

**a. System Logging**

- i. Linux Log Files (9:36)
- ii. Log File Facts
- iii. journald Logging (5:46)
- iv. Configuring journald (8:28)
- v. journald Logging Facts
- vi. Viewing Log Files (10:00)
- vii. Log File Display Facts
- viii. Scripting
- ix. Scripting Overview (8:48)
- x. Script Execution (9:56)
- xi. Creating Simple Scripts (11:07)
- xii. Using Variables within Scripts (7:12)
- xiii. Simple Script Facts
- xiv. Script Control Structures (16:54)
- xv. Creating Script Control Structures (9:03)
  - i. Control Structure Facts
- xvi. Using Functions (9:26)
- xvii. Function Facts
- xviii. Practice Questions

**b. Text Stream Processing**

- 1. Text Stream Processing (16:20)
- 2. awk and sed (8:38)
- 3. Processing Text Streams (10:59)

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4. Text Stream Processing Facts
5. Practice Questions

## XII. NETWORKING

### a. IPv4 Overview

- i. IP Protocols (14:38)
- ii. IP Protocol Facts
- iii. IPv4 Addressing (15:37)
- iv. Subnet Masks (12:24)
- v. Variable Length Subnet Masking (VLSM) (8:38)
- vi. IPv4 Addressing Facts
- vii. Common Ports (10:18)
- viii. IP Port Facts
- ix. Practice Questions

### b. Network Interface Configuration

- i. Network Interface Naming (7:57)
- ii. Address Configuration (11:53)
- iii. Viewing and Managing IPv4 Addresses (9:31)
- iv. Configuring DHCP and Static Addressing (4:57)
- v. Addressing Method Facts
- vi. Network Configuration Facts
- vii. Start a NIC 11.2.8 Stop a NIC
- viii. Practice Questions

### c. IPv6 Overview

- i. IPv6 Addressing (13:58)
- ii. IPv6 Facts
- iii. Configuring IPv6 Addresses (9:34)
- iv. IPv6 Configuration Facts
- v. Practice Questions
- vi. Routing Configuration
- vii. Routing Configuration (13:58)
- viii. Configuring the Default Route (7:36)

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- ix. Routing Facts
- x. Practice Questions

## d. Hostname and DNS Configuration

- i. Hostname and DNS Configuration (12:19)
- ii. Configuring DNS Settings (11:27)
- iii. Testing Name Resolution (8:31)
- iv. Name Resolution Facts
- v. Practice Questions

## e. Network Troubleshooting

- i. Troubleshooting Methodology (7:03)
- ii. Troubleshooting Methodology Facts
- iii. Using Network Troubleshooting Tools (13:06)
- iv. Troubleshooting Tool Facts
- v. Practice Questions

## XIII. SECURITY

### a. Root Usage

- i. The root User (10:06)
- ii. Using su (3:53)
- iii. Configuring sudo (10:44)
- iv. root User Facts
- v. Switch Users
- vi. Log Out of the System
- vii. Practice Questions

### b. User Security and Restriction

- i. User Security (12:53)
- ii. User Restrictions (7:37)
- iii. Configuring User Security and Restrictions (7:51)
- iv. Monitoring User Logins (7:28)
- v. User Security Facts
- vi. Auditing Files (4:02)

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- vii. File Auditing Facts
- viii. Practice Questions
- c. **Login Blocking**
  - i. Login Blocking (6:18)
  - ii. Disabling Login (5:25)
  - iii. Login Blocking Facts
  - iv. Practice Questions
- d. **Network Security**
  - i. Network Security (14:44)
  - ii. Removing Unneeded Services and Scanning Ports (10:27)
  - iii. Network Security Facts
  - iv. Practice Questions
- e. **xinetd Super Daemon**
  - i. xinetd and TCP Wrappers (12:49)
  - ii. Configuring xinetd and TCP Wrappers (11:15)
  - iii. xinetd and TCP Wrapper Facts
  - iv. Practice Questions
- f. **OpenSSH**
  - i. OpenSSH (12:19)
  - ii. Encryption Facts
  - iii. OpenSSH Facts
  - iv. OpenSSH Configuration (12:13)
  - v. Configuring OpenSSH (13:52)
  - vi. OpenSSH Configuration Facts
  - vii. Practice Questions
- g. **SSH Port Tunneling**
  - i. SSH Port Tunneling (4:47)
  - ii. Configuring SSH Port Tunneling (4:47)
  - iii. Practice Questions
- h. **Public Key Authentication**

- i. Public Key Authentication (9:25)
- ii. Configuring Public Key Authentication (10:00)
- iii. Public Key Authentication Facts
- iv. Practice Questions
- i. **Gnu Privacy Guard (GnuPG)**
  - i. GnuPG (12:23)
  - ii. Configuring GnuPG (10:49)
  - iii. Revoking Certificates (4:47)
  - iv. GnuPG Facts
  - v. Practice Questions

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## POLÍTICAS DE PAGO

- Precios en **Pesos Mexicanos** - Excepto casos que se indique en otra moneda de manera expresa
- **LIQUIDACIÓN TOTAL** – Aplica previa al inicio del evento
- **DESCUENTO POR PRONTO PAGO** - Aplica liquidando el total de la inversión hasta 5 días hábiles previos al evento
- **POLÍTICAS DE PRECIOS Y DESCUENTOS** - Sujetas a términos y condiciones de IMECAF
- **FINANCIAMIENTO** – NO aplica



## MÉTODOS DE PAGO

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- BANAMEX - Clabe 002180414600184021

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- BANAMEX - Cuenta 18402
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### TRANSFERENCIA O DEPÓSITO REQUIERE REFERENCIA

- Colocar cualquiera de los siguientes datos como referencia:
- Nombre, razón social, RFC o número de factura

### BENEFICIARIO

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## POLÍTICAS DE CONFIRMACIÓN Y CANCELACIÓN

### PENALIZACIONES

**NO APLICA** - Notificando hasta 6 días hábiles previos al evento

- **20%** - Notificando con menos de 6 días hábiles previos al evento - Se podrá elegir otro Curso pagando la diferencia. En caso de reincidencia, aplica penalización del **100%**
- **100%** - NO SHOW (No Asistencia) o notificando con menos de 72 hrs. hábiles previas al evento
- **CANCELACIONES CON TARJETA DE CRÉDITO / DÉBITO** - Se les descontarán las comisiones efectuadas por el banco emisor (incluyendo la opción de meses sin intereses, en su caso)

## CONFIRMACIÓN OFICIAL

IMECAF notificará **5 días hábiles previos** al evento vía e-mail y/o teléfono del contacto proporcionado por la empresa contratante y ésta deberá confirmar por el mismo medio su asistencia.

Se sugiere realizar la gestión de **viáticos**, en su caso, una vez recibida | IMECAF no se hace responsable por gastos incurridos en este rubro.

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